

CASE SUMMARY

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# DuPont

## DUPONT

Fort Madison, Iowa (Iee County)

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SCHOOL: Briar Cliff College

### The Company

E. I. DuPont de Nemours and Co., Inc. is an international, publicly traded company with over 94,000 employees in the United States. DuPont, Fort Madison, is a chemical manufacturer of high performance polymers, resins, coatings, thinners, and water-based inks.

### Project Background

E. I. DuPont de Nemours Co., Inc. aims to decrease its environmental footprint through pollution prevention methods, corporate goals including zero waste generation, conservation of resources, and respect for the natural environment. By reducing waste, DuPont intends to reduce its environmental impact and unnecessary expenditure.

### Incentives to Change

The company wanted to review their existing on-site pollution prevention, recycling and reuse programs and make recommendations for upgrades and improvements by researching P2 potential for waste streams that were currently not being recycled or reused.

### Results

Intern projects included finding an alternate disposal means for the site's tetrahydrofuran (THF) mixture, evaluating the office paper and cardboard recycling program, reviewing the site's solid waste stream, compiling the Storm Water Pollution Prevention Plan, and participating in weekly RCRA hazardous waste audits.

Reclaiming the THF mixture presented several possibilities, such as sending the waste off site for reclamation, reclaiming the waste while taking in and using another reclaimed stream, or installing reclamation equipment on site. Currently, selling the mixture to a solvent reclaimer is the only feasible option. Other options are being investigated further with adequate research and testing.

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Recycling bins were purchased and placed throughout the facility to help achieve the established 22 percent reduction goal.

Alternate destinations were investigated for containers of fiber and plastic drums, supersacks and peroxide bottles that are currently being landfilled. Reclamation was researched. Currently, two companies are interested in the supersacks, and peroxide bottles will be returned and reused. By finding and implementing alternate disposal routes for the containers, DuPont will be reducing its solid waste stream.

The Storm Water Pollution Prevention Plan and the Weekly RCRA Hazardous Waste Audits demonstrated the initiative DuPont has taken to reduce contamination and increase employee and community safety.

The intern proposed six P<sup>2</sup> opportunities for this business resulting in a landfill diversion of 19,500 pounds of solid waste, incineration avoidance of 2,200 pounds of plastic drums, and the potential elimination of 60,000 gallons of hazardous waste.

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